

ATR NSUF Education Programs

Jeff Benson
Education Programs, ATR NSUF

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ATR-NSUF Mission for University Interactions

Mission

A primary focus of the Advanced Test Reactor National Scientific User Facility (ATR NSUF) is providing a vehicle for university-initiated research projects that advance the state-of-the-art in nuclear technology. Success occurs when an educated and engaged user cadre is formed. University-based interactions will be based on three pillars:

- Informing the academic user community on nuclear energy issues and tools available to address issues
- Establishing mutually beneficial staff exchanges with university partners
- Optimizing ATR NSUF value through strategic partnerships with university facilities

Education Programs

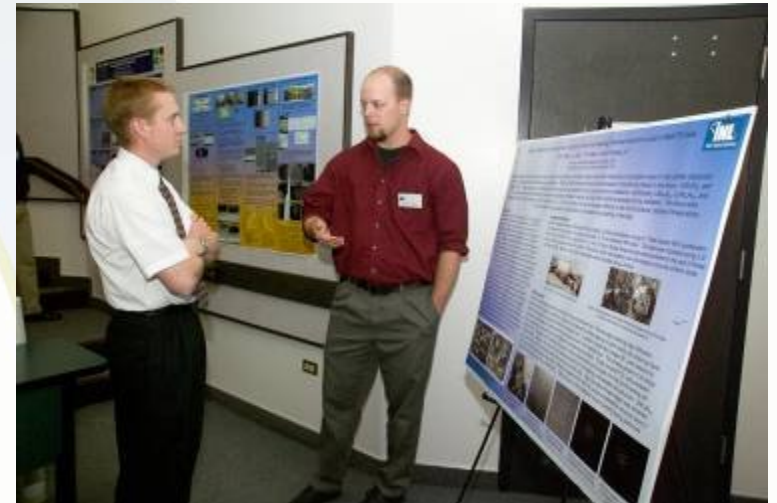
Current and future ATR-NSUF education programs:

- User weeks of focused education opportunities aimed at providing an understanding of key technology gaps, limitations in capability, discussion of recent or emerging advances, and techniques for conducting reactor experiments and PIE.
- Libraries of key technical information
- Technical workshops as a result of experiment data
- New scientific documentation (e.g., textbook on reactor testing)



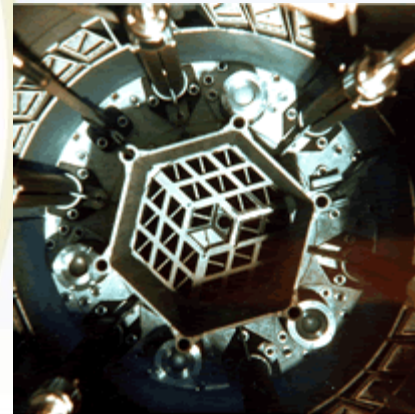
Education Programs continued

- Faculty, post-doc, and student intern programs
 - Undergrad and Graduate internships
 - Faculty/Staff exchanges
 - Post-Doc's (2010-2011)
 - Faculty and student teams
- Workshops or meetings at key technical gatherings or universities to increase general understanding of ATR-NSUF
 - ANS (Fall/Spring/Student ANS)
 - MS&T (Fall)
 - TMS (Winter)
 - University Visits: MIT, NCSU, Ohio State, Oregon State, New Mexico, TAMU, Iowa State, Penn State, Michigan, Berkeley, Illinois, Colorado State, Missouri



Education Programs continued

- Partnership ATR-NSUF facilities - Current agreement
 - MIT, University of Michigan, University of Wisconsin, UNLV
 - Others (solicitation 2009)
 - Call for proposals for additional capability that benefits users
 - University Research Reactors
 - Hot cells or hot laboratories
 - Accelerator facilities
 - Analytical capability



New Ed Programs

Teaching Experiment

- Involve multiple universities in a simple experiment focused on introducing faculty and students to radiation materials science using a test reactor.
- Research Areas
 - IASCC
 - Radiation Resistant Alloys
 - Radiation Resistant Ceramics
 - Advanced Fuel Analogs
- Call within the general call for proposals
- Simple capsule in a defined position



Contact Information

Jeff Benson
208-526-3841
Jeff.Benson@inl.gov

